

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for manufacturing a mask blank having a thin film for forming a mask pattern on a substrate, comprising:

forming a thin film on the substrate by sputtering a sputtering target comprising metal and silicon to deposit the thin film comprising metal, silicon, and at least one of oxygen and nitrogen onto the substrate by reactive sputtering in an atmosphere comprising at least one of an oxygen gas and a nitrogen gas;

wherein the sputtering target has a hardness of 900HV or more in Vickers' hardness, and contains silicon in an amount from more than 80 mol% to 95 mol%.

2. (Original) The method for manufacturing the mask blank according to claim 1, wherein the sputtering target has the hardness of 980HV or more in Vickers' hardness.

3-4. (Canceled)

5. (Previously Presented) The method for manufacturing the mask blank according to claim 1, wherein the thin film is a light semi-transmitting film and the mask blank is a phase shift mask blank.

6. (Previously Presented) The method for manufacturing the mask blank according to claim 1, further comprising:

forming a metal film on the thin film.

7. (Previously Presented) A method for manufacturing a transfer mask by patterning the thin film of the mask blank manufactured by the manufacturing method of claim 1.

8. (Previously Presented) A sputtering target for manufacturing a mask blank by a reactive sputtering method, the sputtering target comprising metal and silicon and having a hardness of 900 HV or more in Vickers' hardness, wherein silicon is from more than 80 mol% to 95 mol% of the sputtering target.

9. (Previously Presented) The sputtering target for manufacturing the mask blank according to claim 8, wherein the sputtering target comprises a metal silicide compound.

10. (Canceled)

11. (Currently Amended) A method for manufacturing a phase shift mask blank, comprising:

sputtering a target ~~containing~~comprising metal and silicon, the target containing silicon in an amount from more than 80 mol% to 95 mol%, in an atmosphere comprising at least one of oxygen and nitrogen to deposit a light semi-transmitting film comprising metal, silicon, and at least one of oxygen and nitrogen on a transparent substrate, wherein based on a correlation between a rate of generating defects in the light semi-transmitting film and a hardness of the target where an increase in the degree of hardness of the target correlates to a decrease in the rate of generating defects, the light semi-transmitting film is deposited with the target having a hardness from 900HV to 1400HV in Vickers' hardness so that the rate of generating the defects is set to be a desired value or less.

12-14. (Canceled)

15. (Previously Presented) The method for manufacturing the mask blank according to claim 1, further comprising:

sintering metal silicide and silicon powders to form the sputtering target.

16. (Previously Presented) The method for manufacturing the mask blank according to claim 15, wherein sintering is performed at a heating temperature of 1300°C or less.

17. (Previously Presented) The method for manufacturing the mask blank according to claim 1, further comprising:

cleaning the thin film after the thin film is formed.

18. (Previously Presented) The method for manufacturing the mask blank according to claim 1, further comprising:

cleaning the thin film after the thin film is formed, wherein the thin film is a light semi-transmitting film.

19. (Previously Presented) The method for manufacturing the mask blank according to claim 1, wherein:

the thin film is a light semi-transmitting film, the light semi-transmitting film has a transmittance of 9% to 20% for an exposure wavelength; and

the mask blank is a phase shift mask blank.

20. (New) The method for manufacturing the mask blank according to claim 1, wherein the metal comprised in the sputtering target is molybdenum or tungsten, and the sputtering target has a hardness of 1100HV or more in Vickers' hardness.

21. (New) The method for manufacturing the mask blank according to claim 1, wherein the thin film comprises metal, silicon, oxygen, and nitrogen, and is formed by the reactive sputtering in the atmosphere containing more of the nitrogen gas than the oxygen gas.

22. (New) The method for manufacturing the mask blank according to claim 1, wherein the thin film is formed by the reactive sputtering in the atmosphere comprising at

least one of carbon, fluorine, and helium in addition to at least one of the nitrogen gas and the oxygen gas.

23. (New) The method for manufacturing the mask blank according to claim 1, wherein the thin film is a light shielding film.

24. (New) The method for manufacturing the mask blank according to claim 1, wherein the metal comprised in the sputtering target excludes tantalum, and the sputtering target has a hardness of 1100HV or more in Vickers' hardness.

25. (New) The sputtering target for manufacturing the mask blank according to claim 8, wherein the metal comprised in the sputtering target is molybdenum or tungsten, and the sputtering target has a hardness of 1100HV or more in Vickers' hardness.

26. (New) The sputtering target for manufacturing the mask blank according to claim 8, wherein the metal comprised in the sputtering target excludes tantalum, and the sputtering target has a hardness of 1100HV or more in Vickers' hardness.